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FILE 'REGISTRY' ENTERED AT 11:06:20 ON 18 JUN 2004 STRUCTURE UPLOADED

L1

10 S L1 L_2

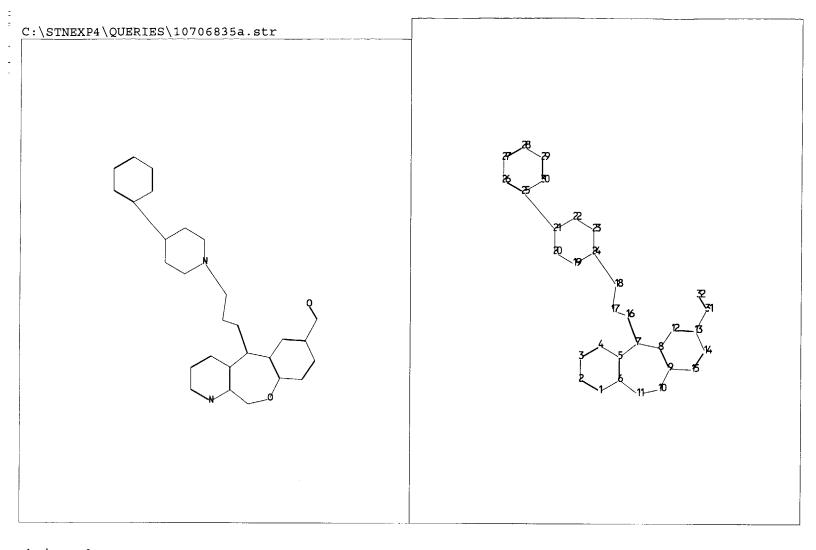
STRUCTURE UPLOADED
2 S L3 L3

L4

L5 46 S L3 SSS FULL

FILE 'CAPLUS' ENTERED AT 11:08:49 ON 18 JUN 2004

L6 6 S L5



chain nodes :

16 17 18 31 32

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 19 20 21 22 23 24 25 26 27 28 29 30

chain bonds :

7-16 13-31 16-17 17-18 18-24 21-25 31-32

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-11 7-8 8-12 8-9 9-10 9-15 10-11 12-13 13-14 14-15 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28 28-29 29-30 exact/norm bonds:

5-7 6-11 7-8 9-10 10-11 18-24 19-20 19-24 20-21 21-22 22-23 23-24 31-32 exact bonds :

7-16 13-31 16-17 17-18 21-25

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-12 8-9 9-15 12-13 13-14 14-15 25-26 25-30 26-27 27-28 28-29 29-30

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:CLASS 32:CLASS

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=> d 1-6 bib abs hitstr
      ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
L6
      2004:430808 CAPLUS
AN
DN
      Preparation of benzoxepino[3,4-b]pyridines as CCR1-antagonists for the
TT
      treatment of demyelinating inflammatory diseases.
     Carson, Kenneth G.; Harriman, Geraldine C. B.
TN
     Millennium Pharmaceuticals, Inc., USA
PΑ
     PCT Int. Appl., 39 pp.
SO
      CODEN: PIXXD2
DΤ
      Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                          KIND DATE
                                                    APPLICATION NO. DATE
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PΙ
     WO 2004043965
                          A1 20040527
                                                   WO 2003-US35817 20031112
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               CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
               GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
               NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM,
               AZ, BY, KG, KZ
          RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
               GQ, GW, ML, MR, NE, SN, TD, TG
     US 2004106639
                         A1
                                 20040603
                                                    US 2003-706835 20031112
PRAI US 2002-425947P
                         P
                                 20021113
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- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB Title compds. I [R1 = halo] and their pharmaceutically acceptable salts were prepared For example, sodium hypochlorite mediated oxidation of Me ketone II (R2 = COMe), prepared from 4-oxopiperidine-1-carboxylic acid tert-Bu ester in 8-steps, afforded benzoxepino[3,4-b]pyridine II (R2 = CO2H) in 96% yield. In inhibition of 125I-MIP-1α binding to THP-1 cell membrane assays, 3-examples of compds. I exhibited Ki values ranging from 2.23->1000 nM, e.g., the Ki of benzoxepino[3,4-b]pyridine II (R2 = CO2H) was 2.3 nM. Compds. I were claimed useful for the treatment of multiple sclerosis.
- IT 690660-14-1P 690660-15-2P 690660-16-3P 690660-17-4P 690660-18-5P 690660-19-6P 690660-20-9P 690660-24-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzoxepino[3,4-b]pyridines as CCR1-antagonists for the treatment of demyelinating inflammatory diseases.)

RN 690660-14-1 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-3,3-dimethyl-1-piperidinyl]propylidene]-5,11-dihydro-(9CI) (CA INDEX NAME)

690660-15-2 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-fluorophenyl)-4-hydroxy-3,3-dimethyl-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME)

RN 690660-16-3 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-bromophenyl)-4-hydroxy-3,3-dimethyl-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME) CN

RN 690660-17-4 CAPLUS
CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[(4S)-4-(4-chlorophenyl)-4-hydroxy-3,3-dimethyl-1-piperidinyl]propylidene]-5,11-dihydro-, (5E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 690660-18-5 CAPLUS
CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[(4S)-4-(4-fluorophenyl)-4-hydroxy-3,3-dimethyl-1-piperidinyl]propylidene]-5,11-dihydro-, (5E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

CN

RN 690660-19-6 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[(48)-4-(4-bromophenyl)-4-hydroxy-3,3-dimethyl-1-piperidinyl]propylidene]-5,11-dihydro-, (5E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 690660-20-9 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[(4S)-4-(4-chlorophenyl)-4-hydroxy-3,3-dimethyl-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

RN 690660-24-3 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[(4R)-4-(4-chlorophenyl)-4-hydroxy-3,3-dimethyl-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

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- L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN RE
- (1) Kyowa Hakko Kogyo Kk; WO 0109138 A 2001 CAPLUS (2) Ohshima, E; US 2002169155 A1 2002

690660-23-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzoxepino[3,4-b]pyridines as CCR1-antagonists for the treatment of demyelinating inflammatory diseases.)

RN 690660-23-2 CAPLUS

Ethanone, 1-[5-[3-(4S)-4-(4-chlorophenyl)-4-hydroxy-3,3-dimethyl-1-CN piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
L6
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2002:869579 CAPLUS AN

DN 137:370077

Preparation of tricyclic-substituted piperidinols and analogs as chemokine TΙ receptor antagonists

Luly, Jay R.; Nakasato, Yoshisuke; Ohshima, Etsuo; Sone, Hiroki; Kotera, Osamu; Harriman, Geraldine C. B.; Carson, Kenneth G. ΙN

PΑ Millennium Pharmaceuticals, Inc., USA

U.S. Pat. Appl. Publ., 138 pp., Cont.-in-part of U.S. Ser. No. 627,886. SO CODEN: USXXCO

DT Patent

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2.2				KIND DATE			APPLICATION NO.					DATE						
ΡI		2002169155		A1		20021114						8908	-	2001				
	US	6613905			B1		20030902			US 1998-148823 19980904								
->		6329385			B1		20011211			US 1999-235102 19990121								
	US	S 2002119973		A.	1	20020829			US 1999-362837					19990728				
	US	JS 6509346		B:	2	20030121												
		WO 2003045942					20030605		WO 2002-US36953					53	20021113			
	WO 2003045942		42	A.	3	2003	0912											
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		RW:													ZW,			
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				SN,	,													
PRAI		US 1998-148823			A2 1998090													
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				A.		19990728												
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OS	MARPAT 137:3700																	

GΙ

AB Therapeutically effective compds. I [Z = (un)substituted cycloalkyl or non-aromatic heterocyclic ring fused to one or more carbocyclic aromatic rings; n = 1-4; M = NR2, CR1R2, OCR1R20, CH2CR1R20; R1 = H, OH, N3, etc.; R2 = H, acyl, aryl, etc.; q1 = 0-3; q2 = 0-1; ring containing M is substituted or unsubstituted; and physiol. acceptable salts thereof] were prepared for treatment of diseases associated with aberrant leukocyte recruitment and/or activation (no data). I displayed chemokine binding activities with IC50 values ranging from < 1 μM to < 1000 μM. Thus, the [([1]benzoxepino[2,3-b]pyridinylidene)propyl]piperidinol II was prepared in three steps by reaction of 5,11-dihydro-7-methoxy[1]benzoxepino[2,3-b]pyridin-5-one with cyclopropylmagnesium bromide in THF, followed by ring cleavage-dehydration-bromination with HBr, and addition of 4-(4-chlorophenyl)-4-hydroxypiperidine to the bromide in DMF. Major and minor isomers were separated

IT 324785-37-7P, [1]Benzoxepino[3,4-b]pyridine-7-butanoic acid,
5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydroγ-oxo-, methyl ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of tricyclic piperidinols as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 324785-37-7 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-butanoic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-γ-oxo-, methyl ester (9CI) (CA INDEX NAME)

233260-14-5P, [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-324782-15-2P, [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-

, methyl ester 324782-79-8P, [1]Benzoxepino[3,4-b]pyridine-7carboxaldehyde, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1piperidinyl]propylidene]-5,11-dihydro- 324782-81-2P, Ethanone, 1-[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]-RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of tricyclic piperidinols as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation) RN 233260-14-5 CAPLUS [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-CN 4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME)

RN 324782-15-2 CAPLUS
CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, methyl ester (9CI) (CA INDEX NAME)

RN 324782-79-8 CAPLUS
CN [1]Benzoxepino[3,4-b]pyridine-7-carboxaldehyde, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME)

RN 324782-81-2 CAPLUS

CN Ethanone, 1-[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]- (9CI) (CA INDEX NAME)

233261-19-3P, [1] Benzoxepino [3,4-b] pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N, N-dimethyl- 324782-09-4P, [1] Benzoxepino[3,4-b] pyridine-7carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N-methyl- 324782-11-8P, [1]Benzoxepino[3,4b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- 324782-13-0P, [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4hydroxy-1-piperidinyl]propylidene]-N,N-diethyl-5,11-dihydro-324782-61-8P, [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N-(2-hydroxyethyl) - 324782-63-0P, [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1piperidinyl]propylidene]-5,11-dihydro-, 1-[[(cyclohexyloxy)carbonyl]oxy]et hyl ester 324782-65-2P, [1]Benzoxepino[3,4-b]pyridine-7carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1piperidinyl]propylidene]-5,11-dihydro-, 1-[(ethoxycarbonyl)oxy]ethyl ester 324783-35-9P, 1-Propanone, 1-[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]324783-37-1P, 1-Propanone, 1-[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-

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piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]-2-
methyl- 324783-39-3P, Methanone, [5-[3-[4-(4-chlorophenyl)-4-
hydroxy-1-piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-
b]pyridin-7-yl]cyclopropyl- 324783-41-7P, [1]Benzoxepino[3,4-
b]pyridine-7-butanoic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-
piperidinyl]propylidene]-5,11-dihydro-γ-oxo- 324783-98-4P,
[1]Benzoxepino[3,4-b]pyridine-7-acetic acid, 5-[3-[4-(4-chlorophenyl)-4-
hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-\alpha-oxo-
324784-40-9P, [1]Benzoxepino[3,4-b]pyridine-7-propanoic acid,
5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-
\beta-oxo-, ethyl ester 324784-42-1P, [1]Benzoxepino[3,4-
b]pyridine-7-carboxylic acid, 5-[3-[4-(4-fluorophenyl)-4-hydroxy-1-
piperidinyl]propylidene]-5,11-dihydro- 324784-62-5P,
[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-
4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, ethyl ester
324784-64-7P, [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid,
5-[3-[4-(4-chlorophenyl)-4-hydroxy-l-piperidinyl]propylidene]-5,11-dihydro-, 2-ethoxy-2-oxoethyl ester 324784-66-9P, [1]Benzoxepino[3,4-
b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-
piperidinyl]propylidene]-5,11-dihydro-, cyclohexyl ester
324784-68-1P, [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid,
5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-
, propyl ester 324784-70-5P, [1]Benzoxepino[3,4-b]pyridine-7-
carboxylic acid, 5-(3-[4-(4-chlorophenyl)-4-hydroxy-1-
piperidinyl]propylidene]-5,11-dihydro-, butyl ester 324784-72-7P
 [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-
chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-,
1-methylethyl ester 324784-74-9P, [1]Benzoxepino[3,4-b]pyridine-
7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-
piperidinyl]propylidene]-5,11-dihydro-, cyclopentyl ester
324784-76-1P, [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid,
5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-
, 2-(4-morpholinyl)ethyl ester 324784-78-3P,
[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-
4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 2-(diethylamino)ethyl
ester 324784-80-7P, [1]Benzoxepino[3,4-b]pyridine-7-carboxylic
acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-
dihydro-, (2,2-dimethyl-1-oxopropoxy)methyl ester 324784-82-9P,
[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-
4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 2-hydroxyethyl ester
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of tricyclic piperidinols as chemokine receptor antagonists for
   treatment of diseases associated with aberrant leukocyte recruitment and
   activation)
233261-19-3 CAPLUS
[1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-
hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N,N-dimethyl- (9CI) (CA
INDEX NAME)
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RN

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RN 324782-09-4 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N-methyl- (9CI) (CA INDEX NAME)

RN 324782-11-8 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME)

RN 324782-13-0 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-N,N-diethyl-5,11-dihydro- (9CI) (CA INDEX NAME)

324782-61-8 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-{4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

324782-63-0 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 1[[(cyclohexyloxy)carbonyl]oxy]ethyl ester (9CI) (CA INDEX NAME) CN

RN 324782-65-2 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 1-[(ethoxycarbonyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

RN 324783-35-9 CAPLUS

CN 1-Propanone, 1-[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]-(9CI) (CA INDEX NAME)

RN

324783-37-1 CAPLUS
1-Propanone, 1-[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]-2-CN methyl- (9CI) (CA INDEX NAME)

RN 324783-39-3 CAPLUS

Methanone, [5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]cyclopropyl- (9CI) (CA CN

RN

324783-41-7 CAPLUS [1]Benzoxepino[3,4-b]pyridine-7-butanoic acid, $5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-<math>\gamma$ -oxo- (9CI) (CA CN INDEX NAME)

$$HO_2C-CH_2-CH_2-CH_2-CH_2$$
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2

324783-98-4 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-acetic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- α -oxo- (9CI) (CA CN

RN 324784-40-9 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-propanoic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-β-oxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 324784-42-1 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-fluorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-(9CI) (CA INDEX NAME)

RN 324784-62-5 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, ethyl ester (9CI) (CA INDEX NAME)

RN 324784-64-7 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 2-ethoxy-2-oxoethyl ester (9CI) (CA INDEX NAME)

RN 324784-66-9 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, cyclohexyl ester (9CI) (CA INDEX NAME)

RN 324784-68-1 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, propyl ester (9CI) (CA INDEX NAME)

RN 324784-70-5 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, butyl ester (9CI) (CA CN INDEX NAME)

324784-72-7 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 1-methylethyl ester (9CI) (CA INDEX NAME) CN

10706835

RN 324784-74-9 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, cyclopentyl ester (9CI) (CA INDEX NAME)

RN 324784-76-1 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)

RN 324784-78-3 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 2-(diethylamino)ethyl ester (9CI) (CA INDEX NAME) CN

$$\mathsf{Et}_2\mathsf{N}-\mathsf{CH}_2-\mathsf{CH}_2-\mathsf{O}-\mathsf{C}$$

324784-80-7 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, (2,2-dimethyl-1-oxopropoxy)methyl ester (9CI) (CA INDEX NAME) CN

RN 324784-82-9 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)

IT 324785-94-6, [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid,
5-[3-[4-(4-fluorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-

, methyl ester

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of tricyclic piperidinols as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 324785-94-6 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-fluorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, methyl ester (9CI) (CA INDEX NAME)

10706835

IT 475085-24-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tricyclic-substituted piperidinals and analogs as chemical contents of the conte

(preparation of tricyclic-substituted piperidinols and analogs as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 475085-24-6 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-3-methyl-1-piperidinyl]propylidene]-5,11-dihydro-, methyl ester, monoformate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 475085-23-5 CMF C30 H31 Cl N2 O4

CM 2

CRN 64-18-6 CMF C H2 O2

О=== СН- ОН

IT 475085-30-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tricyclic-substituted piperidinols and analogs as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 475085-30-4 CAPLUS

In [1] Benzoxepino[3,4-b] pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-3-methyl-1-piperidinyl] propylidene]-5,11-dihydro-, monoformate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 475085-29-1 CMF C29 H29 C1 N2 O4

CM 2

CRN 64-18-6 CMF C H2 O2

О СН−ОН

L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:658747 CAPLUS

DN 137:185480

 ${\tt TI}$ — Preparation of tricyclic-substituted piperidinols and analogs as chemokine receptor antagonists

IN Luly, Jay R.; Nakasato, Yoshisuke; Ohshima, Etsuo; Sone, Hiroki; Kotera, Osamu; Harriman, Geraldine C. B.

PA USA

SO U.S. Pat. Appl. Publ., 102 pp., Cont.-in-part of U.S. Ser. No. 235,102. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 6

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PΙ	US 2002119973	A1	20020829	US 1999-362837	19990728		
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	US 6613905	B1	20030902	US 1998-148823	19980904		
	US 6329385	B1	20011211	US 1999-235102	19990121		
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                                                 WO 2002-US36953
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     WO 2000-US20732
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     MARPAT 137:185480
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$$M \longrightarrow N \longrightarrow J_n$$

Disclosed is a method of treating a subject with a disease associated with aberrant leukocyte recruitment and/or activation. Therapeutically effective tricyclic-substituted piperidinols and analogs thereof, represented by structural formula I [M = CR1R2 where R1 = H, OH, alkyl, (un)substituted alkoxy, SR3; R3 = H or substituted alkyl, (un)substituted alkylcarboxy, alkoxycarbonyl, CN, COOH, CONR4R5; R2 = OH, (un)substituted acyl, NR6R7, (un)substituted alkyl, aryl, etc.; R4-7 = H, (un)substituted acyl, aliphatic aromatic, heterocycle, etc., or, R1, R2, R4 and R5, or R6 and R7 taken together with the atom to which they are bonded form a (un)substituted carbocyclic or heterocyclic ring; Z = (un)substituted

cycloalkyl or non-aromatic heterocyclic ring fused to one or more carbocyclic aromatic rings; n = 1-4] and their physiol. acceptable salts are prepared Chemokine binding activities of test compds. are reported with IC50 values ranging from <1 to <1000 μM . Thus, II was prepared via substitution of 5-(3-bromopropylidene)-10,11-dihydro-5H-dibenzo[a,d]cycloheptene with 4-(4-chlorophenyl)-4-hydroxypiperidine.

IT 233260-14-5P, [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid,
5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro324782-15-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tricyclic-substituted piperidinols and analogs as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 233260-14-5 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-(9CI) (CA INDEX NAME)

RN 324782-15-2 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, methyl ester (9CI) (CA INDEX NAME)

233261-19-3P, [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N, N-dimethyl- 324782-09-4P 324782-11-8P 324782-13-0P 324782-61-8P 324782-63-0P 324782-65-2P 324782-79-8P 324782-81-2P 452092-87-4P 452092-88-5P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of tricyclic-substituted piperidinols and analogs as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation) RN 233261-19-3 CAPLUS CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N,N-dimethyl- (9CI) (CA

RN 324782-09-4 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N-methyl- (9CI) (CA INDEX NAME)

324782-11-8 CAPLUS

RN

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-

hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME)

324782-13-0 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-N,N-diethyl-5,11-dihydro- (9CI) (CA CN INDEX NAME)

324782-61-8 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME) CN

RN 324782-63-0 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 1[[(cyclohexyloxy)carbonyl]oxy]ethyl ester (9CI) (CA INDEX NAME)

RN 324782-65-2 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 1-[(ethoxycarbonyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

RN 324782-79-8 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxaldehyde, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME)

RN 324782-81-2 CAPLUS

CN Ethanone, 1-[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]- (9CI) (CA INDEX NAME)

RN

452092-87-4 CAPLUS
Pyrrolidine, 1-[[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]carbonyl]- (9CI) (CA INDEX NAME) CN

RN

452092-88-5 CAPLUS
Morpholine, 4-[[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7yl]carbonyl]- (9CI) (CA INDEX NAME) CN

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     ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
ΑN
      2001:896498 CAPLUS
DN
     136:20060
     Preparation of tricyclic-substituted piperidinols and analogs as chemokine
TI
      receptor antagonists
IN
      Luly, Jay R.; Nakasato, Yoshisuke; Ohshima, Etsuo
PΑ
     Millennium Pharmaceuticals, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.
SO
     U.S., 71 pp., Cont.-in-part of U.S. Ser. No. 148,823.
     CODEN: USXXAM
DT
      Patent
LA
     English
FAN.CNT 6
      PATENT NO.
                         KIND DATE
                                                 APPLICATION NO.
                                                                     DATE
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     MARPAT 136:20060
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$$M \longrightarrow N \longrightarrow J n$$

Disclosed is a method of treating a subject with a disease associated with aberrant leukocyte recruitment and/or activation. Therapeutically effective tricyclic-substituted piperidinols and analogs thereof, represented by structural formula I (M = CR1R2 where R1 = H, OH, alkyl, (un)substituted alkoxy, SR3 wherein R3 = H or substituted alkyl, (un)substituted alkylcarboxy, alkoxycarbonyl, CN, COOH, CONR4R5; R2 = OH, (un)substituted acyl, NR6R7, (un)substituted alkyl, aryl, etc., wherein R4, R5, R6 and R7 are independently H, (un)substituted acyl, aliphatic aromatic, heterocycle, etc. or , R1 and R2, R4 and R5, or R6 and R7 taken together with the atom to which they are bonded form a (un)substituted carbocyclic or heterocyclic ring; Z = (un)substituted cycloalkyl or non-aromatic heterocyclic ring fused to one or more carbocyclic aromatic rings; n = 1-4), and their physiol. acceptable salts are prepared Chemokine binding activities of test compds. are reported with IC50 values ranging from <1 to <1000 uM. Thus, II was prepared via substitution of 5-(3-bromopropylidene)-10,11-dihydro-5H-dibenzo[a,d]cycloheptene with 4-(4-chlorophenyl)-4-hydroxypiperidine.

IT 233260-14-5P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tricyclic-substituted piperidinols and analogs as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 233260-14-5 CAPLUS
CN [1]Benzoxepino[3.4-]

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-(9CI) (CA INDEX NAME)

233261-19-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of tricyclic-substituted piperidinols and analogs as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 233261-19-3 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N,N-dimethyl- (9CI) (CA INDEX NAME)

RE.CNT 110 THERE ARE 110 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
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ΑN 2001:101145 CAPLUS

DN 134:163016

TIPreparation of tricyclic-substituted piperidinols and analogs as chemokine receptor antagonists

Luly, Jay R.; Nakasato, Yoshisuke; Ohshima, Etsuo; Sone, Hiroki; Kotera, ΙN Osamu; Harriman, Geraldine C. B.; Carson, Kenneth G.

PΑ Millennium Pharmaceuticals, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.

SO PCT Int. Appl., 323 pp. CODEN: PIXXD2

Patent

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US 1998-10320 B2 19980121 US 1998-148823 A2 19980904 US 1999-235102 A2 19990121 WO 2000-US20732 W 20000728 OS MARPAT 134:163016 GT

Disclosed is a method of treating a subject with a disease associated with aberrant leukocyte recruitment and/or activation. Therapeutically effective compds. represented by structural formula I [Z = (un)substituted cycloalkyl or non-aromatic heterocyclic ring fused to one or more carbocyclic aromatic rings; n = 1-4; M = NR2, CR1R2, OCR1R2O, CH2CR1R2O; R1 = H, OH, N3, etc.; R2 = H, acyl, aryl, etc.; q1 = 0-3; q2 = 0-1; ring containing M is substituted or unsubstituted] and physiol. acceptable salts thereof are prepared Chemokine binding activities of test compds. are reported with IC50 values ranging from < 1 to < 1000 µM. Thus, 4-(4-chlorophenyl)-1-[3-(5,11-dihydro-7-methoxy[1]benzoxepino[2,3-b]pyridin-5- ylidene]propyl]piperidin-4-ol (II) is prepared in three steps by reaction of 5,11-dihydro-7-methoxy[1]benzoxepino[2,3-b]pyridin-5-one with cyclopropylmagnesium bromide in THF, followed by ring cleavage-dehydration-bromination with HBr, and addition of 4-(4-chlorophenyl)-4-hydroxypiperidine to the bromide in DMF. Major and minor isomers were separated

IT 233260-14-5P 324782-15-2P 324782-79-8P 324782-81-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tricyclic piperidinols as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 233260-14-5 CAPLUS
CN [1]Benzoxepino[3,4-b

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-(9CI) (CA INDEX NAME)

RN 324782-15-2 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, methyl ester (9CI) (CA INDEX NAME)

RN 324782-79-8 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxaldehyde, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME)

RN 324782-81-2 CAPLUS

CN Ethanone, 1-[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]- (9CI) (CA INDEX NAME)

IT 233261-19-3P 324782-09-4P 324782-11-8P 324782-13-0P 324782-61-8P 324782-63-0P 324782-65-2P 324783-35-9P 324783-37-1P 324783-39-3P 324783-41-7P 324783-98-4P 324784-60-9P 324784-62-5P 324784-64-7P 324784-76-1P 324784-78-3P 324784-78-P 324784-80-7P 324784-82-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of tricyclic piperidinols as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 233261-19-3 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N,N-dimethyl- (9CI) (CA INDEX NAME)

RN 324782-09-4 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N-methyl- (9CI) (CA INDEX NAME)

RN 324782-11-8 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- (9CI) (CA INDEX NAME)

RN

324782-13-0 CAPLUS [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-N,N-diethyl-5,11-dihydro- (9CI) (CA CN

RN 324782-61-8 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

RN 324782-63-0 CAPLUS

CN [1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 1-[[(cyclohexyloxy)carbonyl]oxy]ethyl ester (9CI) (CA INDEX NAME)

324782-65-2 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 1-[(ethoxycarbonyl)oxy]ethyl ester (9CI) (CA INDEX NAME) CN

RN

324783-35-9 CAPLUS
1-Propanone, 1-[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]-CN (9CI) (CA INDEX NAME)

RN

324783-37-1 CAPLUS
1-Propanone, 1-[5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]-2-methyl- (9CI) (CA INDEX NAME)

RN

324783-39-3 CAPLUS
Methanone, [5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]5,11-dihydro[1]benzoxepino[3,4-b]pyridin-7-yl]cyclopropyl- (9CI) (CA CN INDEX NAME)

324783-41-7 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-butanoic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- γ -oxo- (9CI) (CA INDEX NAME) CN

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RN

324783-98-4 CAPLUS [1]Benzoxepino[3,4-b]pyridine-7-acetic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- α -oxo- (9CI) (CA CN

324784-40-9 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-propanoic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro- β -oxo-, ethyl ester (9CI) (CA INDEX NAME) CN

RN

324784-42-1 CAPLUS
[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-fluorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-(9CI) (CA INDEX NAME) CN

324784-62-5 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, ethyl ester (9CI) (CA INDEX NAME)

324784-64-7 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 2-ethoxy-2-oxoethyl ester (9CI) (CA INDEX NAME) CN

324784-66-9 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, cyclohexyl ester (9CI) (CA INDEX NAME) CN

RN

324784-68-1 CAPLUS
[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, propyl ester (9CI) CN (CA INDEX NAME)

RN 324784-70-5 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, butyl ester (9CI) (CA INDEX NAME) CN

RN 324784-72-7 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 1-methylethyl ester CN (9CI) (CA INDEX NAME)

324784-74-9 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, cyclopentyl ester (9CI) (CA INDEX NAME) CN

RN

324784-76-1 CAPLUS
[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME) CN

RN 324784-78-3 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 2-(diethylamino)ethyl ester (9CI) (CA INDEX NAME) CN

324784-80-7 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-l-piperidinyl]propylidene]-5,11-dihydro-, (2,2-dimethyl-l-oxopropoxy)methyl ester (9CI) (CA INDEX NAME) CN

RN 324784-82-9 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, 2-hydroxyethyl ester (9CI) (CA INDEX NAME) CN

324785-94-6 IΤ

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of tricyclic piperidinols as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

324785-94-6 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-fluorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-, methyl ester (9CI) (CA INDEX NAME)

324785-37-7P IΤ

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic piperidinols as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 324785-37-7 CAPLUS

[1]Bonzoxepino[3,4-b]pyridine-7-butanoic acid, 5-[3-[4-(4-chlorophenyl)-4-CN (9CI) (CA INDEX NAME)

- ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN L6
- 1999:487299 CAPLUS ΑN
- DN 131:116224
- Tricyclic-substituted piperidinols and analogs useful as chemokine TΙ
- receptor antagonists and methods of use therefor Luly, Jay R.; Nakasato, Yoshisuke; Ohshima, Etsuo IN
- Leukosite, Inc., USA; Kyowa Hakko Kogyo Co., Ltd. PCT Int. Appl., 203 pp. CODEN: PIXXD2 PΑ
- SO
- ${\rm DT}$ Patent
- English T.A
- FAN.CNT 6
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              TJ, TM
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$$Z = \begin{pmatrix} CH_2 \end{pmatrix} n - N \qquad M \qquad I \qquad N \qquad O \qquad II$$

Disclosed is a method of treating a subject with a disease associated with aberrant leukocyte recruitment and/or activation. Therapeutically effective compds. represented by structural formula I [Z = (un)substituted cycloalkyl or non-aromatic heteocyclic ring fused to one or more carbocyclic aromatic rings; n=1-4 or (CH2)n may be replaced by an aliphatic or aromatic spacer group; M=NR2, CR1R2; R1=H, OH, aliphatic group, CN, (un) substituted OH, SH, CO2H, carbamoyl, or amino, cyano, etc.; R2 = H, OH, (un) substituted aliphatic group, aromatic group, benzylic group, or non-aromatic heterocyclic group; R groups may form rings] and physiol. acceptable salts thereof are prepared Chemokine binding activities of test compds. are reported with IC50 values ranging from < 1 to < 1000 $\mu\text{M}.$ Thus, 4-(4-chlorophenyl)-1-[3-(5,11-dihydro-7-methoxy[1]benzoxepino[2,3b]pyridin-5-ylidene)propyl]piperidin-4-ol (II) is prepared in three steps by reaction of 5,11-dihydro-7-methoxy[1]benzoxepino[2,3-b]pyridin-5-one with cyclopyropylmagnesium bromide in THF, followed by ring cleavage-dehydration-bromination with HBr, and addition of 4-(4-chlorophenyl)-4-hydroxypiperidine to the bromide in DMF. Major and minor isomers were separated

IT 233260-14-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tricyclic piperidinols as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 233260-14-5 CAPLUS

[1]Benzoxepino[3,4-b]pyridine-7-carboxylic acid, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-(9CI) (CA INDEX NAME)

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ΙT 233261-19-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tricyclic piperidinols as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

233261-19-3 CAPLUS RN

[1]Benzoxepino[3,4-b]pyridine-7-carboxamide, 5-[3-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]propylidene]-5,11-dihydro-N,N-dimethyl- (9CI) (CA CN INDEX NAME)

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 13 ALL CITATIONS AVAILABLE IN THE RE FORMAT